



Federal Emergency Management Agency

Washington, D.C. 20472

AUG 11 2006

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

The Honorable Harry Kim
Mayor, County of Hawaii
25 Aupuni Street, Room 215
Hilo, HI 96720

IN REPLY REFER TO:

Case No.: 06-09-B247P
Community Name: Hawaii County, HI
Community No.: 155166
Effective Date of **DEC 21 2006**
This Revision:

Dear Mayor Kim

The Flood Insurance Study report and Flood Insurance Rate Map for your community have been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel(s) revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed which provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Federal Insurance and Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Oakland, California, at (510) 627-7175, or the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

Sincerely,

Michael B. Godesky, Project Engineer
Engineering Management Section
Mitigation Division

For: William R. Blanton Jr., CFM, Chief
Engineering Management Section
Mitigation Division

List of Enclosures:

Letter of Map Revision Determination Document
Annotated Flood Insurance Rate Map
Annotated Flood Insurance Study Report

cc: Mr. Bruce C. McClure
Public Works Department
County of Hawaii

Mr. Bruce K. Meyers
Okahara & Associates, Inc



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION

PROJECT DESCRIPTION

BASIS OF REQUEST

COMMUNITY

Hawaii County
Hawaii
(Unincorporated Areas)

CULVERT
FILL

HYDRAULIC ANALYSIS
NEW TOPOGRAPHIC DATA

COMMUNITY NO.: 155166

IDENTIFIER

Mohouli Street Extension, Ainako Avenue to Komohana Street

APPROXIMATE LATITUDE & LONGITUDE: 19.707, -155.107
SOURCE: USGS QUADRANGLE DATUM: NAD 83

FLOODING SOURCE(S) & REVISED REACH(ES)

Alenaio Stream – from approximately 1,360 feet downstream to approximately 2,360 feet upstream of Mohouli Street

SUMMARY OF REVISIONS

Effective Flooding:	BFEs*	Zone AE	X (shaded)	Floodway
Revised Flooding:	BFEs*	Zone AE	X (unshaded)	Floodway
Increases:	YES	YES	YES	YES
Decreases:	NONE	YES	YES	NONE

* BFEs – Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES

ANNOTATED STUDY ENCLOSURES

TYPE: FIRM* NO.: 155166 0880 C Date: September 16, 1988

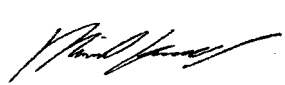
DATE OF EFFECTIVE FLOOD INSURANCE STUDY: April 2, 2004
FLOODWAY DATA TABLE: 2
PROFILE: 29P, 30P, 31P

* FIRM – Flood Insurance Rate Map; ** FBFM – Flood Boundary and Floodway Map; *** FHBM – Flood Hazard Boundary Map

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at <http://www.fema.gov/nfip>.


Michael B. Godesky, Project Engineer
Hazard Identification Section
Mitigation Division

106979 10.3.1.0609B247-102IAC



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the culvert rests with your community. We may request that your community submit a description and schedule of culvert activities.


COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at <http://www.fema.gov/nfip>.


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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

COMMUNITY INFORMATION (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Sally M. Ziolkowski
Director, Federal Insurance and Mitigation Division
Federal Emergency Management Agency, Region IX
1111 Broadway Street, Suite 1200
Oakland, CA 94607-4052
(510) 627-7175

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel[s] and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

PUBLIC NOTIFICATION OF REVISION

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised BFEs presented in this LOMR may be changed.

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below.

LOCAL NEWSPAPER


Name: *Hawaii Tribune-Herald*

Dates: 09/14/2006 09/21/2006

PUBLIC NOTIFICATION

FLOODING SOURCE	LOCATION OF REFERENCED ELEVATION	BFE (FEET NGVD)		MAP PANEL NUMBER(S)
		EFFECTIVE	REVISED	
Alenaio Stream	Approximately 1,055 feet upstream of Mohouli Street	349	350	0880 C
	Approximately 1,630 feet upstream of Mohouli Street	391	397	0880 C

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-827-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at <http://www.fema.gov/nfip>.


Michael B. Godesky, Project Engineer
Hazard Identification Section
Mitigation Division

106979 10.3.1.0609B247-102IAC

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR HAWAII COUNTY, HAWAII, UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On September 16, 1988, the Department of Homeland Security's Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in Hawaii County, Hawaii, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Division has determined that modification of the elevations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) for certain locations in this community is appropriate. The modified Base Flood Elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

A hydraulic analysis was performed to incorporate the effects of the extension of Mohouli Street, the construction of various size culverts and fill. The analysis includes the area along Alenaio Stream from approximately 1,360 feet downstream to approximately 2,360 feet upstream of Mohouli Street and has resulted in a revised delineation of the regulatory floodway, an increase in SFHA width, a decrease in SFHA width, increased BFEs, and decreased BFEs for the revised reach of Alenaio Stream. The aforementioned channelized portion of Alenaio Stream at Mohouli Street contains the base flood. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding source(s) cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Approximately 1,055 feet upstream of Mohouli Street	349	350
Approximately 1,630 feet upstream of Mohouli Street	391	397

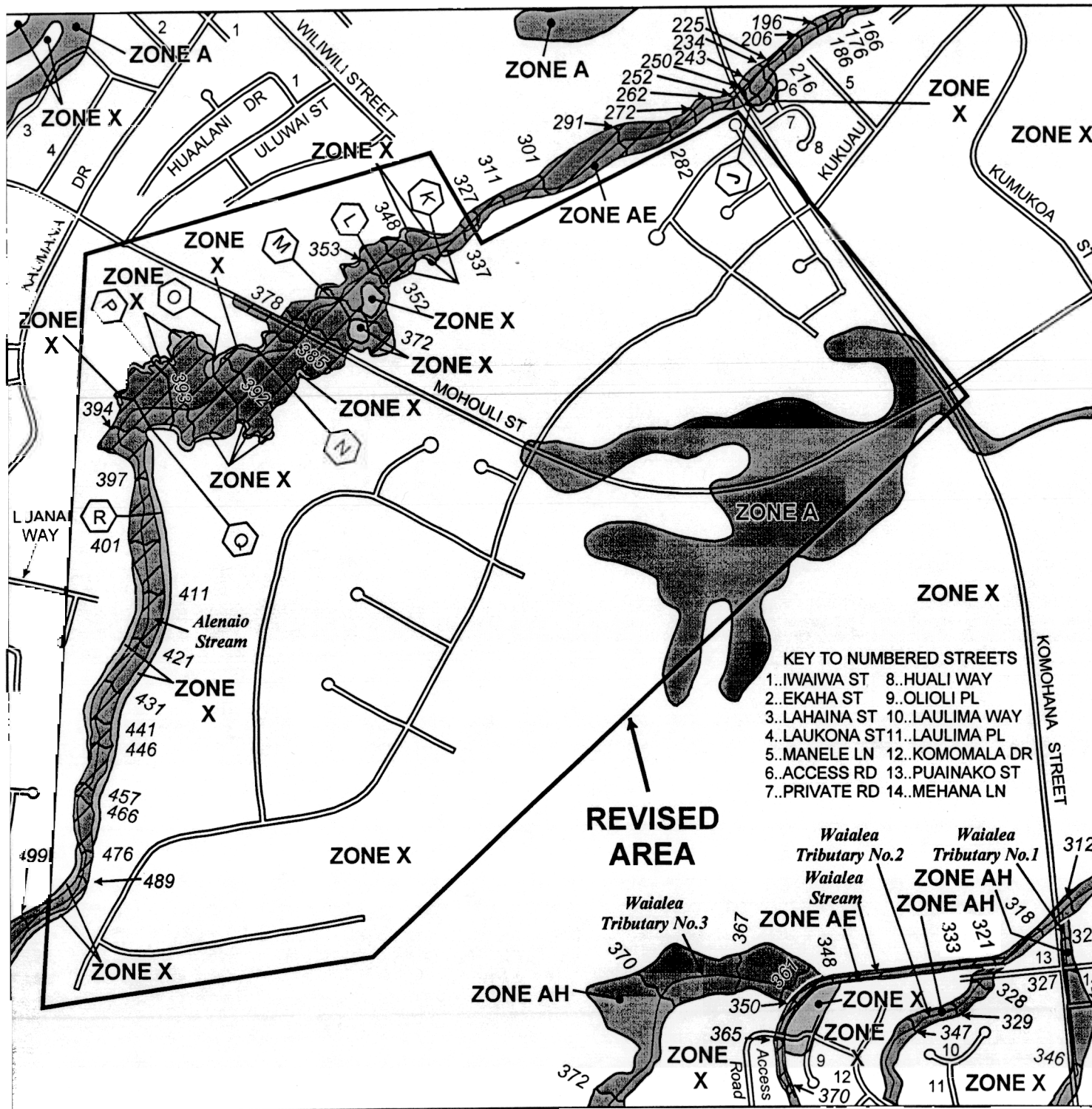
*National Geodetic Vertical Datum, rounded to nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Division must develop criteria for floodplain management. To participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Mitigation Division reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Division's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Harry Kim
Mayor, County of Hawaii
25 Aupuni Street, Room 215
Hilo, HI 96720



Legend

- 1% annual chance (100-Year) Floodplain
- 1% annual chance (100-Year) Floodway
- 0.2% annual chance (500-Year) Floodplain



APPROXIMATE SCALE IN FEET

1,000 500 0 1,000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

**HAWAII COUNTY,
HAWAII**

PANEL 880 OF 939
(SEE MAP INDEX FOR PANELS NOT PRINTED)


**REVISED TO
REFLECT LOMR
EFFECTIVE DEC 21 2006**

COMMUNITY-PANEL NUMBER
155166 0880 C

MAP REVISED:
SEPTEMBER 16, 1988



Federal Emergency Management Agency

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH ² (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY FEET (NGVD)	WITH FLOODWAY	INCREASE ³
Alenaio Stream								
A	3,480	884	4,284	1.2	20.0	20.0	20.2	0.2
B	3,700	611	2,016	2.5	21.0	21.0	21.0	0.0
C	4,070	750	1,814	2.8	26.6	26.6	26.6	0.0
D	4,300	545	1,667	3.1	31.6	31.6	32.6	1.0
E	4,640	165	1,005	5.8	38.6	38.6	38.6	0.0
F	4,985	67	517	11.3	52.1	52.1	52.1	0.0
G	5,360	47	376	15.6	66.4	66.4	66.5	0.1
H	5,795	114	627	9.3	84.3	84.3	84.3	0.0
I	6,065	115	623	9.4	91.4	91.4	91.4	0.0
J	9,885	132	650	9.0	249.4	249.4	249.5	0.1
K - R	(No Floodway Determined - See Section 4.2 of the FIS Report)							
Revised Area 								

¹ Feet Above Confluence With Waiola River.

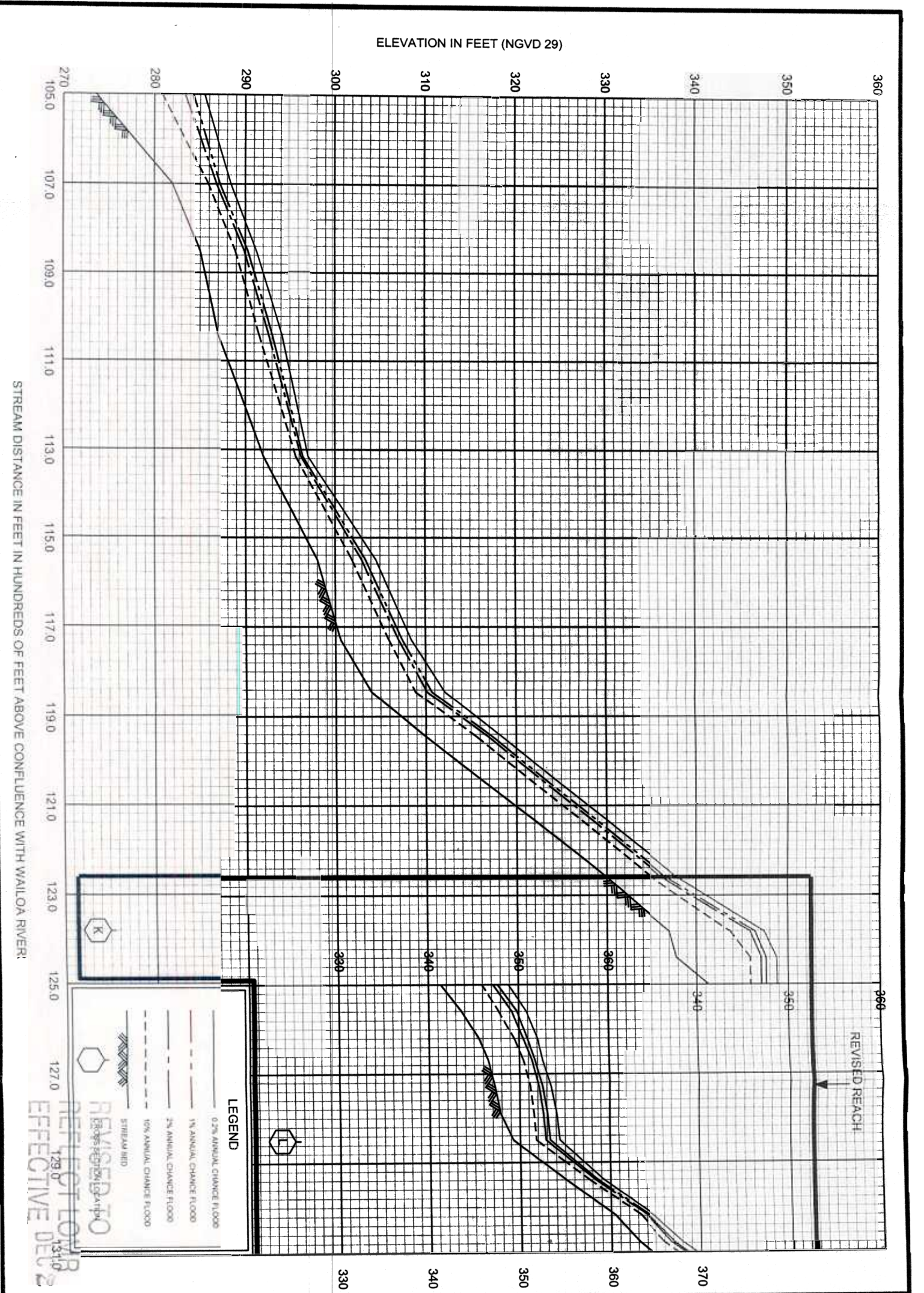
REVISED TO
REFLECT LOMR
EFFECTIVE DEC 21 2006

TABLE 2

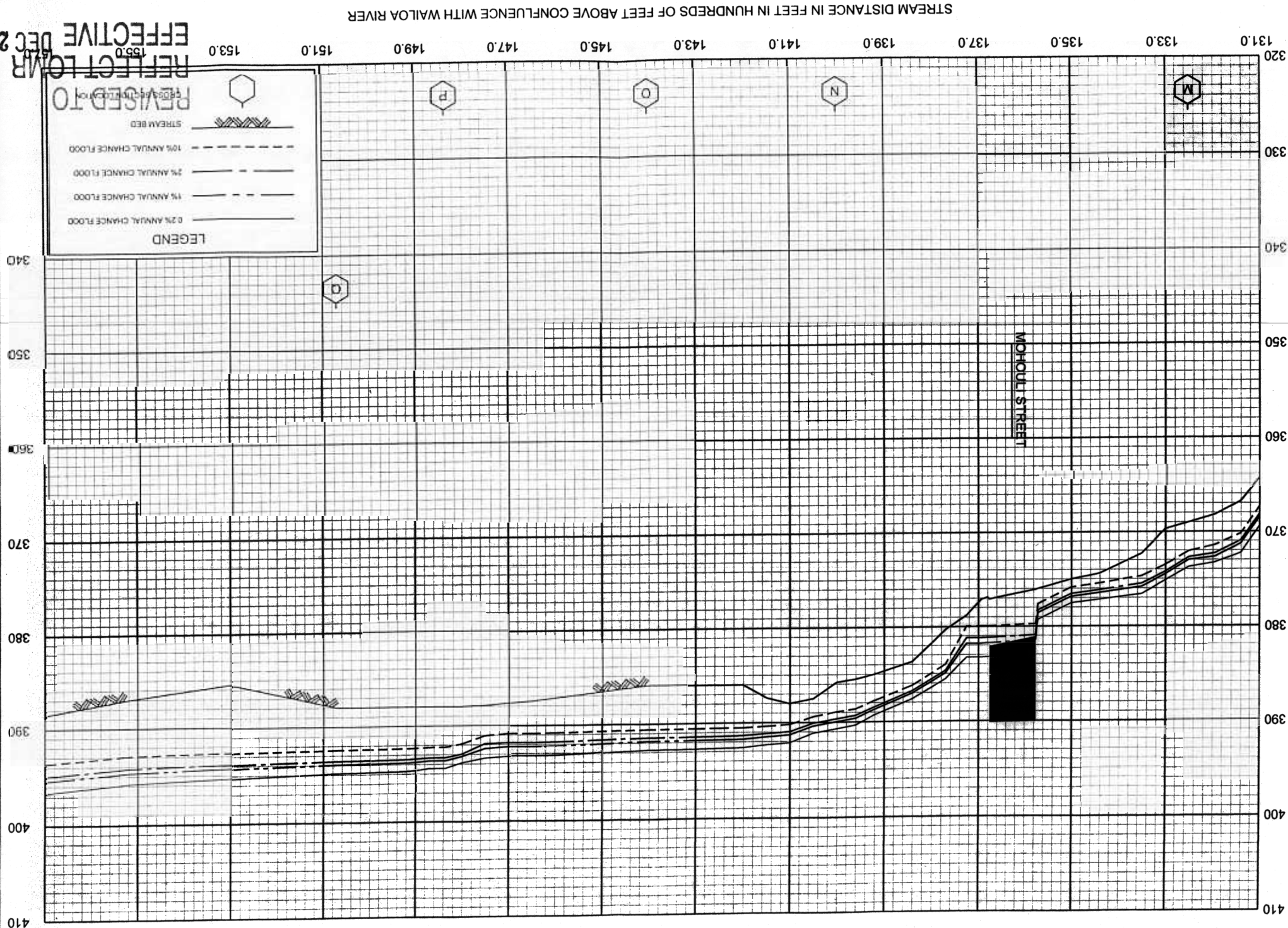
FEDERAL EMERGENCY MANAGEMENT AGENCY
HAWAII COUNTY, HAWAII

FLOODWAY DATA

ALENAIO STREAM



ELEVATION IN FEET (NGVD 29)



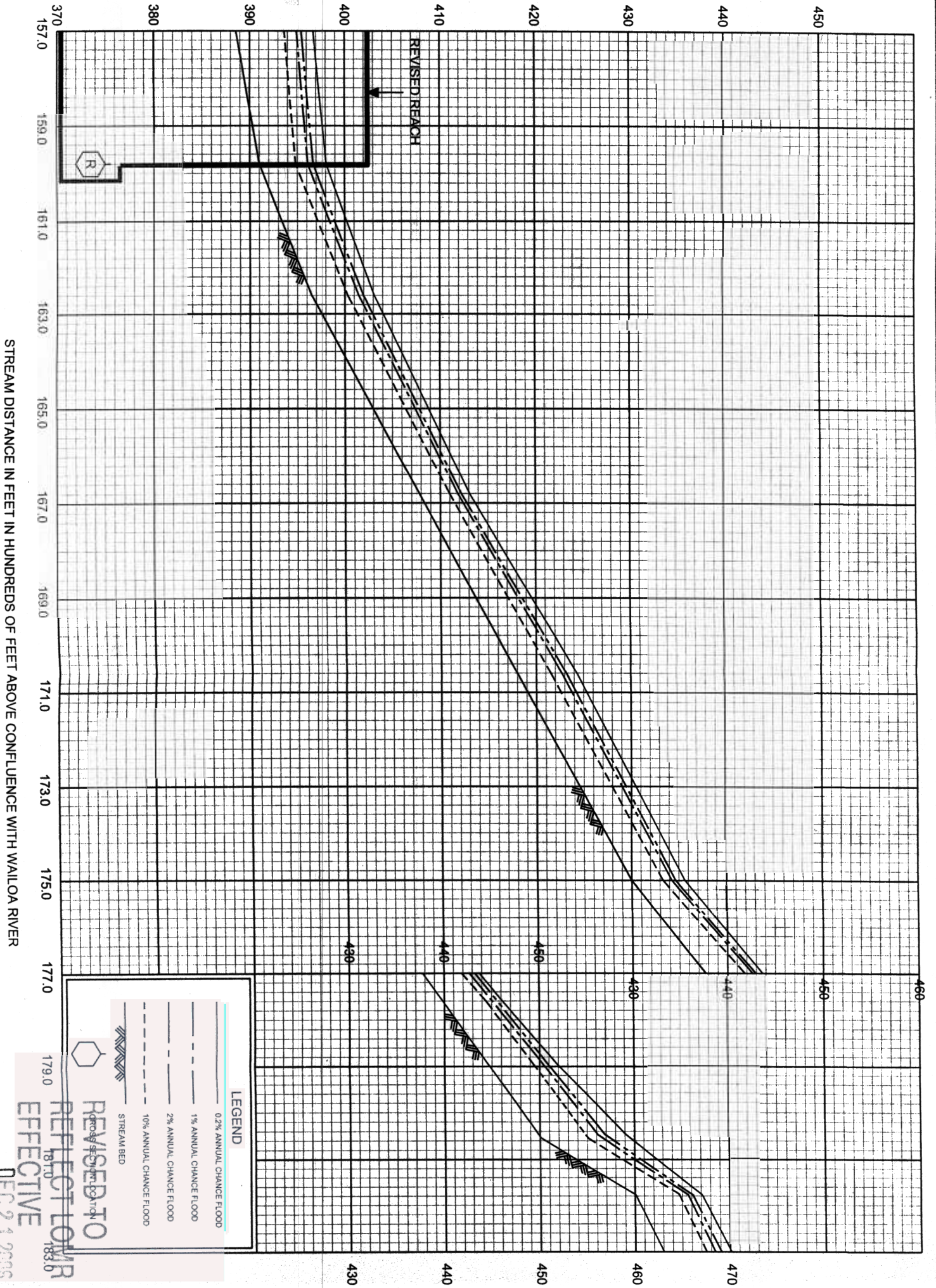
REVISED TO
EFFECTIVE DEC 21 2006

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAWAII COUNTY, HI

FLOOD PROFILES
ALENAIO STREAM

30P

ELEVATION IN FEET (NGVD 29)



FEDERAL EMERGENCY MANAGEMENT AGENCY

HAWAII COUNTY, HI

FLOOD PROFILES

ALENAIO STREAM